

DEPARTMENT OF HOMELAND SECURITY

U.S. Coast Guard

CGD09-05-127

Remedial Action Project for Petroleum and Metals Impacted
Soil at Passage Island Light Station, Keweenaw County,
Michigan; Environmental Assessment

AGENCY: U.S. Coast Guard, DHS.

ACTION: Notice of intent and request for public comments.

SUMMARY: The U.S. Coast Guard (USCG) announces its intent to prepare an Environmental Assessment (EA) for remedial action associated with petroleum and metals impacted soil at the Passage Island Light Station, Keweenaw County, Michigan. This letter shall serve as notification for a thirty-day scoping period for the Draft EA. This scoping announcement provides interested parties with information on the USCG Passage Island Light Station, existing environment, and proposed action in advance of issuance of the Draft EA for this project. The Draft EA will assess the alternatives to address impacted soil at the light station. The USCG seeks public and agency input on the scope of the Draft EA. Specifically, the USCG requests input on any environmental concerns that the public may have related to the existing impacted soil, the remedial

action alternatives, or sources of relevant data or information for inclusion in the Draft EA.

DATES: Comments and related material must be post-marked on or before 30 days after the date of this notice.

ADDRESSES: Comments and related material regarding the USCG Passage Island Draft EA scoping must be received or post-marked on or before 30 days after the date of this notice. Comments may be submitted in several ways; they must be addressed directly to the Civil Engineering Unit Cleveland's Environmental Compliance Section and may be mailed, e-mailed, faxed, or delivered in person. To make sure your comments and related material are not entered more than once in the public record, please submit them by only one of the following means:

(1) By mail to Commanding Officer, USCG Civil Engineering Unit (CEU), Attn: Lynn Keller, 1240 East Ninth Street, Room 2179, Cleveland, OH 44199-2060.

(2) By delivery to Room 2179 on the twenty-first floor of the Anthony J. Celebrezze Federal Building, 1240 East Ninth Street, Cleveland, OH, 44199-2060 between 7:30 a.m. and 4 p.m., Monday through Friday, except Federal holidays. The general office telephone number is 216-902-6200.

(3) By fax to the USCG Civil Engineering Unit at 216-902-6277. Please indicate on the fax "Attn: Lynn Keller."

(4) By electronic mail to
LKeller@ceucleveland.uscg.mil and/or
FBlaha@ceucleveland.uscg.mil.

The USCG Civil Engineering Unit Cleveland will maintain the public record for this notice. Comments submitted as described above will become part of the public record and will be available for inspection or copying in Room 2179, located on the twenty-first floor of the Anthony J. Celebrezze Federal Building, 1240 East Ninth Street, Cleveland, OH, 44199-2060 between 7:30 a.m. and 4 p.m., Monday through Friday, except Federal holidays. Comments submitted during the Draft EA scoping period will be included in the Draft EA document as an Appendix.

You may also view, download, and print draft and final documents for the Passage Island EA on the USCG CEU Cleveland website at

<http://www.uscg.mil/mlclant/ceucleveland/er/uscgpassageligh>
[t.htm](http://www.uscg.mil/mlclant/ceucleveland/er/uscgpassagelight.htm). The CEU Cleveland web site navigation page is located at <http://www.uscg.mil/mlclant/ceucleveland/>

FOR FURTHER INFORMATION: If you have questions about this notice or the Passage Island EA, you may contact Mr. Frank Blaha at (216) 902-6255 and FBlaha@ceucleveland.uscg.mil or Ms. Lynn Keller at (216) 902-6258 and LKeller@ceucleveland.uscg.mil.

SUPPLEMENTARY INFORMATION:

Request for Comments

The USCG requests that any interested party provide any additional information or potential concerns regarding the presence of significant natural or cultural resources that may be potentially affected by the project. Persons submitting comments should include their names and addresses, this notice reference number CGD09-05-127, and the reasons for each comment. You may submit your comments and materials by mail, hand delivery, fax, or electronic means as directed under ADDRESSES. If you choose to submit them by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, and suitable for copying and electronic filing. If you submit them by mail and would like to know if they reached the CEU, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and materials received during the comment period.

Background and Purpose

Passage Island is located in the northwestern reaches of Lake Superior, about 60 miles north of Michigan's Keweenaw Peninsula, 22 miles east of Grand Portage, Minnesota, and 35 miles south of Thunder Bay, Ontario. The

USCG Passage Island Light Station is located on Passage Island, three and one quarter miles off the northeastern tip of Isle Royale in Lake Superior, within the Isle Royale National Park. Congress designated about 99 percent of Isle Royale National Park as Wilderness in 1976. In addition, Isle Royale was designated a U.S. Biosphere Reserve by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 1980.

The USCG lighthouse and associated facilities are located on the southernmost portion of Passage Island, Section 9, T67N R32W, Houghton Township, Keweenaw County, Michigan. Areas of petroleum and metals impacted soils from Light Station activities occupy approximately 0.25 acres of the 6.3-acre site. In accordance with Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA) of 1994, as amended (Michigan Part 201), the Michigan Department of Environmental Quality (MDEQ) requires that the environmental impacts associated with former operations at the site be investigated and mitigated.

The USCG performed a Phase I Environmental Site Assessment (ESA) in 1997. The Phase I ESA identified possible sources of environmental impact and recommended a Site Investigation (SI) be performed to characterize and

delineate the potential sources. The USCG performed an SI at the Passage Island Light Station in 2001. Based on the results of the SI, the USCG concluded that petroleum and metals impacted soils exist at concentrations in excess of the Residential Criteria established under the Michigan Part 201. The impacted area is approximately 8,000 square feet. The depth of impact is approximately 6 inches and the volume of impacted soil is approximately 150 cubic yards. In order to mitigate environmental and human health impacts of the impacted soils, the USCG proposes remedial actions for the site.

NEPA Requirements & Proposed Soil Remediation Project

Description

In accordance with the National Environmental Policy Act (NEPA) of 1969 (Section 102(2)(c)), as implemented by the Council on Environmental Quality (CEQ) regulations (40 CFR parts 1500-1508), Department of Transportation (DOT) Order 5610.C (Procedures for Considering Environmental Impacts), and USCG Policy (NEPA: Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1D (Commandant's Instruction)), the USCG intends to prepare an EA. The purpose of the EA is to develop an approach and direction for implementing a petroleum and metals impacted soil remedial project for the impacted area

at Passage Island Light Station. Following completion of the EA, the USCG will either file a Finding of No Significant Impact (FONSI) or prepare an Environmental Impact Statement (EIS) to evaluate potentially significant environmental impacts.

NEPA requires federal agencies to consider all significant aspects of environmental impacts that may result from a proposed action, to inform the public of potential impacts and alternatives, including the no action alternative, and to facilitate public involvement in the assessment process. The core of our impact assessment process is our EA. The EA will include, among other topics, discussions of the purpose and need for the proposed action, a description of alternatives, a description of the affected environment, and an evaluation of the environmental impacts of the proposed action and alternatives. To date, the USCG has identified the following alternatives for analysis in the EA:

- Excavation and re-contouring (no backfill) with off-site disposal as hazardous waste; restricted site closure;
- Excavation and re-contouring (no backfill) with on-site stabilization of contaminated soil and off-site

disposal of stabilized soil as non-hazardous waste;
restricted site closure; and,

- No Action (Status Quo).

The USCG-preferred remedial action method involves excavation of contaminated soil using a vacuum truck located on a barge in Lake Superior, adjacent to the excavation area. Soils would be loosened with hand tools and then vacuumed up. Field screening would be conducted using hand-held x-ray fluorescence (XRF) equipment to assess the excavation extents for the metals-impacted soil. A photoionization detector (PID) would be used to assess the excavation extents for the petroleum-impacted soil. Confirmatory soil samples would be collected from the sidewalls and floor of the excavation to ensure that soil impacted at concentrations exceeding levels approved by Michigan Department of Environmental Quality (Michigan Residential Criteria or a Calculated Site-Specific Criteria) has been removed. At the request of the National Park Service (NPS), backfill material would not be brought on-site due to concerns regarding introduction of non-native and invasive species. Site restoration would include smoothing out the sides of the excavations and ensuring proper drainage and protection of structure foundations. Contaminated soil would be directly

transferred to containers on a barge as the soil is vacuumed up. The containerized soil would then be transported by barge to Duluth, Minnesota, where it will be loaded onto trucks. The trucks would transport the soil to an approved Type I hazardous waste Treatment-Storage-Disposal Facility (TSDF). Due to the high lead levels, the soil would be treated at the landfill via stabilization to meet the Toxicity Characteristic Leaching Procedure (TCLP) standards prior to disposal. The proposed TSDF and disposal facility for hazardous soil is either Onyx Special Services in Menominee Falls, WI or EQ in Belleville, MI. The USCG would need to comply with the United States Environmental Protection Agency (USEPA) Resources Conservation and Recovery Act (RCRA) large quantity generator requirements, which include payment of fees and filing necessary reports. In addition, due to disposal of hazardous waste, the USCG could be placed on the Hazardous Waste Compliance Docket and the site could potentially be listed as a National Priorities List (NPL) site. A deed restriction would be placed on the property to limit use. Groundwater use would be restricted and the current recreational land use and zoning would be maintained.

In addition to the USCG preferred method described above, one alternative remedial action method under consideration would include contaminated soil excavation, on-site soil stabilization and off-site disposal as a non-hazardous waste. This alternative would include using a vacuum truck located on a barge in Lake Superior, adjacent to the excavation area. Soils would be loosened with hand tools and then vacuumed up. Field screening would be conducted using hand-held XRF equipment to assess the excavation extents for the metals-impacted soil. A PID would be used to assess the excavation extents for the petroleum-impacted soil. Confirmatory soil samples would be collected from the sidewalls and floor of the excavation to ensure that soil impacted at concentrations exceeding the Michigan Residential Criteria or Calculated Site-Specific Criteria (if approved by Michigan Department of Environmental Quality) has been removed. At the request of the NPS, backfill material would not be brought on-site due to concerns regarding introduction of non-native and invasive species. Site restoration would include smoothing out the sides of the excavations and ensuring proper drainage and protection of structure foundations. Soil would be mixed with a stabilizing agent prior to transportation to a dock in Duluth, Minnesota. The soil would then be transported

to a non-hazardous waste disposal facility. The proposed non-hazardous waste disposal facility is K&W located in Ontonagon, MI. A deed restriction would be placed on the property to limit use. Groundwater use would be restricted and the current recreational land use and zoning would be maintained.

Due to NEPA requirements and the sensitive nature of the sub-Arctic environment and presence of listed plant species at Passage Island Light Station, the no action alternative is also being considered in lieu of performing a soil removal for remedial action. The MDEQ does not support this alternative as the soil contamination at the site is seen as a threat to humans and water resources.

Several other remedial alternatives have been considered and will be discussed briefly in the EA due to their limited applicability at the site in question. These alternatives include the following:

- Hot spot removal;
- Soil stabilization;
- Phytoremediation;
- Heap leaching;
- Soil capping/engineered barrier;
- Soil washing;

- Groundwater surface water interface (GSI) and drinking water pathway elimination and no further action;
- Risk Assessment and no further action;
- State listed/threatened/species of concern plant species relocation (combined with other alternatives);

EA Issues

Issues that the USCG has identified for analysis to date include the effects of the remediation project alternatives on the following resources:

- Land Use (Recreation) and Aesthetics;
- Historic and Cultural Properties;
- Vegetation, Wildlife, Threatened and Endangered Species;
- Water Quality;
- Human Health;
- Air Quality;
- Soil Depletion and Regeneration;
- Noise;
- Transportation (Shipping and Boating); and,
- Generation of Hazardous Materials and Waste.

Cultural Resources

The USCG Passage Island Light Station was established by Executive Order in 1871, and remaining structures at the site date back to 1882. The Passage Island Light Station is eligible for listing on the National Register of Historic Places. In August 2004, a Phase I archaeological cultural resource survey was conducted for the Passage Island Light Station site. Based on a Phase I survey program that combined archival research with pedestrian reconnaissance and subsurface testing, it has been determined that there are no significant prehistoric or historic resources within the 0.25-acre study area. This survey was submitted to the Michigan State Historic Preservation Office (SHPO) along with the required documentation for a project review for the proposed soil remediation work. The Michigan SHPO determined that the proposed action will have no adverse effect on historic and cultural resources at the site as long as the USCG ensures that structures are not damaged during clean up activities and proper grading is achieved.

Natural Resources

Topographically, the Passage Island Light Station area is similar to the nearby Isle Royale. Elevations range from 620 to 640 feet above mean sea level or approximately 20 to 40 feet above the immediately adjacent Lake Superior

(600 feet above mean sea level). The light station area is located at the crest of a bedrock outcrop, bounded on the south, east, and west by wave-cut exposures leading down to Lake Superior, and to the north by forested portions of the island. Soils have developed, accumulated, or been placed in general proximity to the various Light Station structures and in low areas between bedrock exposures. Vegetation in the Light Station vicinity is limited to grasses, weeds, and few small woody shrubs. No Federally listed plant or animal species have been identified. Specimens of one State Threatened plant species, prickly saxifrage (*Saxifraga tricuspidata*), are located in the vicinity of the Light Station, but outside of the contamination footprint. The USCG has obtained Michigan Department of Natural Resources (MDNR) Permit #1615 for the take of this State Threatened Species if necessary to perform the clean up work. Specimens of twisted whitlow grass (*Draba arabisans*), a State Species of Concern, are located within the contamination footprint. According to MDNR, there are no legal obligations to protect a State Listed Special Concern plant species.

Public Comment and Document Accessibility

The USCG encourages public participation in the Draft EA process. The scoping period will start with publication

of this notice in the Federal Register. Following the scoping process, the USCG will prepare a Draft EA. A Notice of Availability will be published in the Federal Register when the Draft EA is available. Public notices will be mailed or e-mailed to those that have requested a copy of the Draft EA. This period will provide the public with an opportunity to review the document and to offer appropriate comments.

Comments received during the public scoping period and Draft EA review period will be available in the public record and made available in the Final EA. A Notice of Availability of the Final EA will be published in the Federal Register, along with the intent of the USCG to either issue a FONSI or proceed with an EIS.

All draft and final documents will be available online for viewing and downloading at the USCG CEU Cleveland web site (see ADDRESSES). Additionally, a hard copy of all draft and final documents will be available in the following public libraries for public inspection and copying:

Portage Lake District Library—Houghton, MI

Mackinaw Area Public Library—Mackinaw City, MI

Peter White Public Library—Marquette, MI

Bayliss Public Library—Sault Sainte Marie, MI

Duluth Public Library—Duluth, MN

Lansing Public Library—Lansing, MI

If you have any questions regarding this notice,
please contact Frank Blaha or Lynn Keller of the USCG Civil
Engineering Unit Cleveland Environmental Compliance staff
at (216) 902-6255 and (216) 902-6258, respectively.

Dated:

J. M. Peters,

Commanding Officer, United States Coast Guard Civil
Engineering Unit Cleveland